in or with both defense articles enumerated on the U.S. Munitions List and also commodities not on the U.S. Munitions List; or

(5) Was or is being developed as a general purpose commodity or software, *i.e.*, with no knowledge for use in or with a particular commodity (e.g., a F/A-18 or HMMWV) or type of commodity (e.g., an aircraft or machine tool).

NOTE TO PARAGRAPHS (a) AND (b): The term "commodity" refers to any article, material, or supply, except technology/technical data or software.

NOTE TO PARAGRAPH (a)(1): An example of a commodity that as a result of development has properties peculiarly responsible for achieving or exceeding the controlled performance levels, functions, or characteristics in a U.S. Munitions List category would be a swimmer delivery vehicle specially designed to dock with a submarine to provide submerged transport for swimmers or divers from submarines.

NOTE TO PARAGRAPH (b): The term "enumerated" refers to any article on the U.S. Munitions List or the Commerce Control List and not in a "catch-all" control. A "catch-all" control is one that does not refer to specific types of parts, components, accessories, or attachments, but rather controls unspecified parts, components, accessories, or attachments only if they were specially designed for an enumerated item.

NOTE 1 TO PARAGRAPH (b)(3): For the purpose of this definition, "production" means all production stages, such as product engineering, manufacture, integration, assembly (mounting), inspection, testing, and quality assurance. This includes "serial production" where commodities have passed production readiness testing (i.e., an approved, standardized design ready for large scale production and have been or are being produced on an assembly line for multiple commodities using the approved, standardized design.

NOTE 2 TO PARAGRAPH (b)(3): For the purpose of this definition, "development" is related to all stages prior to serial production, such as: design, design research, design analyses, design concepts, assembly and testing of prototypes, pilot production schemes, design data, process of transforming design data into a product, configuration design, integration design, layouts.

Note 3 to paragraph (b)(3): Commodities in "production" that are subsequently subject to "development" activities, such as those that would result in enhancements or improvements only in the reliability or maintainability of the commodity (e.g., an increased mean time between failure (MTBF)), including those pertaining to quality improvements, cost reductions, or fea-

ture enhancements, remain in "production." However, any new models or versions of such commodities developed from such efforts that change the basic performance or capability of the commodity are in "development" until and unless they enter into "production."

NOTE 4 TO PARAGRAPH (b)(3): The form of a commodity is defined by its configuration (including the geometrically measured configuration), material, and material properties that uniquely characterize it. The fit of a commodity is defined by its ability to physically interface or connect with or become an integral part of another commodity. The function of a commodity is the action or actions it is designed to perform. Performance capability is the measure of a commodity's effectiveness to perform a designated function in a given environment (e.g., measured in terms of speed, durability, reliability, pressure, accuracy, efficiency). For software, the form means the design, logic flow, and algorithms. The fit is defined by its ability to interface or connect with a defense article. The function means the action or actions the software performs directly related to a defense article or as a standalone application. Performance canability means the measure of the software's effectiveness to perform a designated function.

NOTE 5 TO PARAGRAPH (b)(3): With respect to a commodity, "equivalent" means its form has been modified solely for fit purposes.

NOTE 1 TO PARAGRAPHS (b)(4) AND (5): For a defense article not to be specially designed on the basis of paragraph (b)(4) or (5) of this section, documents contemporaneous with its development, in their totality, must establish the elements of paragraph (b)(4) or (5). Such documents may include concept design information, marketing plans, declarations in patent applications, or contracts. Absent such documents, the commodity may not be excluded from being specially designed by either paragraph (b)(4) or (5).

Note 2 to paragraphs (b)(4) and (5): For the purpose of this definition, "knowledge" includes not only the positive knowledge a circumstance exists or is substantially certain to occur, but also an awareness of a high probability of its existence or future occurrence. Such awareness is inferred from evidence of the conscious disregard of facts known to a person and is also inferred from a person's willful avoidance of facts.

[78 FR 22754, Apr. 16, 2013; 78 FR 61754, Oct. 3, 2013, as amended at 79 FR 61227, Oct. 10, 2014]

§ 120.42 Subject to the Export Administration Regulations (EAR).

Items "subject to the EAR" are those items listed on the Commerce Control List in part 774 of the EAR and all

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other items that meet the definition of that term in accordance with §734.3 of the EAR. The EAR is found at 15 CFR parts 730 through 774.

[78 FR 22755, Apr. 16, 2013]

§120.43 [Reserved]

§ 120.44 Foreign defense article or defense service.

Foreign defense article or defense service means any article or service described on the U.S. Munitions List of non-U.S. origin. Unless otherwise provided in this subchapter, the terms defense article and defense service refer to both U.S. and foreign origin defense articles and defense services described on the U.S. Munitions List. A defense article or defense service is determined exclusively in accordance with the Arms Export Control Act and this subchapter, regardless of any designation (either affirming or contrary) that may be attributed to the same article or service by any foreign government or international organization.

[78 FR 52686, Aug. 26, 2013]

§ 120.45 End-items, components, accessories, attachments, parts, firmware, software, systems, and equipment.

- (a) An *end-item* is a system, equipment, or an assembled article ready for its intended use. Only ammunition or fuel or other energy source is required to place it in an operating state.
- (b) A component is an item that is useful only when used in conjunction with an end-item. A major component includes any assembled element that forms a portion of an end-item without which the end-item is inoperable. A minor component includes any assembled element of a major component.
- (c) Accessories and attachments are associated articles for any component, equipment, system, or end-item, and which are not necessary for its operation, but which enhance its usefulness or effectiveness.
- (d) A part is any single unassembled element of a major or a minor component, accessory, or attachment which is not normally subject to disassembly without the destruction or the impairment of designed use.

- (e) Firmware and any related unique support tools (such as computers, linkers, editors, test case generators, diagnostic checkers, library of functions, and system test diagnostics) directly related to equipment or systems covered under any category of the U.S. Munitions List are considered as part of the end-item or component. Firmware includes but is not limited to circuits into which software has been programmed.
- (f) Software includes but is not limited to the system functional design, logic flow, algorithms, application programs, operating systems, and support software for design, implementation, test, operation, diagnosis and repair. A person who intends to export only software should, unless it is specifically enumerated in §121.1 of this subchapter (e.g., USML Category XIII(b)), apply for a technical data license pursuant to part 125 of this subchapter.
- (g) A *system* is a combination of parts, components, accessories, attachments, firmware, software, equipment, or end-items that operate together to perform a function.

Note to paragraph (g): The industrial standards established by INCOSE and NASA provide examples for when commodities and software operate together to perform a function as a system. References to these standards are included in this note to provide examples for when commodities or software operate together to perform a function as a system. See the INCOSE standards for what constitutes a system at: http://g2sebok.incose.org/app/mss/asset.cfm?ID=INCOSE%20G2SEBOK%202.00&ST=F,

- and in INCOSE SE Handbook v3.1 2007; ISO/IEC 15288:2008. See the NASA standards for examples of what constitutes a system in NASA SE Handbook SP-2007-6105 Rev 1.
- (h) Equipment is a combination of parts, components, accessories, attachments, firmware, or software that operate together to perform a function of, as, or for an end-item or system. Equipment may be a subset of an enditem based on the characteristics of the equipment. Equipment that meets the definition of an end-item is an enditem. Equipment that does not meet